**NASA DEVELOP National Program**

**DEVELOP** LaRC

**Spring 2015**

**Virtual Poster Session Wave 1 Submission**

**DEVELOP Short Title:** CALIPSO Health & Air Quality

**Team Location:** Langley Research Center – Hampton, Virginia

**Project Lead & Email:** Jordan Vaa, jordan.s.vaa@nasa.gov

**VPS Title:** Selecting and Classifying CALIPSO Data Elements for Future Use

**Image:** File Name **(Please submit your image as a .svg file)**

*This is the image that will be displayed on your team’s project page on Earthzine. It needs to be an image of processed data (processed by the team and not from any outside source) and include NASA Earth observations. No photographs. 300 dpi minimum.*

**Caption:** The updated GUI for the CALIPSO Visualization tool.

**Squib:** This project was done in order to extend the usefulness of CALIPSO data, by allowing researchers to easily share findings and data between one another. Utilizing internet and image processing software to build a database of useful data elements.

**Video Style**: We are going for a technical theme, thus our video will mostly be focused on computers and as well as the programs running on the computer. The opening will show the CALIPSO satellite with the CALIOP Lidar firing (We will include a citation). From there we will introduce the team and then introduce the community concerns. From there we will introduce our program and give a step through of its running. We will show how to access our tool, how to load an HDF file, and then how to plot the image from there. From here the video will end.



**Things to include in the video, other than the lead in and closing clips, the order of inclusion is entirely up to the team:**

Mandatory Lead in: DEVELOP Intro clip (available on the Exchange at: Start > Earthzine – Virtual Poster Sessions > Video Opening & Closing Clips)

Video Opening: The video starts with following CALIPSO as it orbits the Earth. The screen narrows in to follow a segment of data generated to the ground receivers, through wires, onto our computer screen, and into the tool.

Community Concerns:

* Updating the Current tool/ Translating it into Python
* Enabling support for future connection to database

Collaborators & End-Users:

* The CALIPSO Science team is the end user

How will Participants be introduced: Each group member turns around from their computer and smiles at the camera while their name flashes across the bottom.

Data Usage:

* Downloading CALIPSO Data to test tool

Benefits:

* Open source platform for the tool, allowing for greater collaboration and update support

Mandatory Video Closing: DEVELOP closing clip (available on the Exchange at: Start > Earthzine – Virtual Poster Sessions > Video Opening & Closing Clips)